

International application No.
PCT/US02/06099

A. CLASSIFICATION OF SUBJECT MATTER  IPC(7) :HO5B 6/34 US CL : 266/200, 242; 373/161 According to International Patent Classification (IPC) or to both national classification and IPC  B. FIELDS SEARCHED  Minimum documentation searched (classification system followed by classification symbols)  U.S. : 266/200, 242; 373/161  Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where appr	opriate, of the relevant passages	Relevant to claim No.
A	US 4,596,020 A (HALEN) 17 JUNE 1986, figure1		1-29
A	US 3,996,412 A (SCHAFER et al) 07 December 1976, figure 3.		1-29
A	GB 2,165,628 A (BOTTA) 16 April 1986, figure 1.		1-29
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Further documents are listed in the continuation of Box C.  See patent family annex.  Special categories of cited documents:  later document published after the international filing date or priority			
"A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier document published on or after the international filing date  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means  "P" document published prior to the international filing date but later "a		date and not in conflict with the application but cited to understand the principle or theory underlying the invention  "X"  document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  "Y"  document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art  document member of the same patent family	
Date of the actual completion of the international search  Date of mailing of the international search report			search report
17 JUNE 2002		09 JUL 2002	
Commission Box PCT	mailing address of the ISA/US ner of Patents and Trademarks on, D.C. 20231 Io. (703) 305-3230	Authorized officer  SCOTT KASTLER  C.C.C. Telephone No. (703) 308-2506	elicity